

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	ATTY. DOCKET NO. 2997-1-2-2	SERIAL NO. 09/434,695
	APPLICANT BARCLAY	
	FILING DATE November 5, 1999	GROUP ART 1761

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
<i>du</i>	AA	5,415,879	5/16/95	Oh	1	1	
	AB	5,234,699	8/10/93	Yeo	1	1	
	AC	5,133,963	7/28/92	Ise	2	1	
	AD	5,012,761	5/7/91	Oh	1	1	
	AE	4,792,418	12/20/88	Rubin et al.	1	1	
	AF	4,758,438	7/1988	Stroz et al.	1	1	
	AG	4,304,794	12/1981	Dwivedi et al.	1	1	
	AH	3,924,017	12/1975	Lee et al.	1	1	
	AI	3,908,028	9/1975	Neely et al.	1	1	
	AJ	3,908,026	9/1975	Neely et al.	1	1	
	AK	3,667,969	6/1972	Kracauer	1	1	
	AL	3,647,482	3/1972	Yueh	1	1	
	AM	3,296,079	1/1967	Griffin	1	1	
	AN	5,130,242	07/14/92	Barclay	1	1	
	AO	4,670,285	06/02/87	Clandinin et al.	1	1	
	AP	5,340,742	08/23/94	Barclay	1	1	
<i>du</i>	AQ	5,340,594	08/23/94	Barclay	1	1	

FOREIGN PATENT DOCUMENTS

EXAMINER <i>Anthony Waier</i>	DATE CONSIDERED <i>2/28/00</i>
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		DOCUMENT NUMBER	DATE	COUNTRY	CLAS S	SUB CLASS	TRANSLATION	
							YES	NO
<i>AW</i>	AR	WO 89/00606	1/26/89	PCT	/	/		
	AS	WO 88/10112	12/29/88	PCT	/	/		
	AT	60-105471	10/6/85	JAPAN	/	/		
	AU	58-213613	6/10/85	JAPAN	/	/		
	AV	58-196068	5/17/85	JAPAN	/	/		
	AW	WO 92/12711	08/06/92	PCT	/	/		
	AX	WO 91/14427	10/03/91	PCT	/	/		
<i>AW</i>	AY	0 231 904 A2	08/12/87	EPO	/	/		

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

<i>AW</i>	AZ	Ainsworth, "Introduction and Keys to Higher Taxa.", pp. 1-7, 1973, in <i>The Fungi. An Advanced Treatise</i> , Vol. 4B, (G.C. Ainsworth et al. eds., Academic Press)
	BA	Bahnweg et al., "A New Approach to Taxonomy of the Thraustochytriales and Labyrinthulales", pp. 131-140, 1986, in <i>The Biology of Marine Fungi</i> , (S.T. Moss ed., Cambridge University Press)
	BB	Bartnicki-Garcia, "The Cell Wall: A Crucial Structure in Fungal Evolution", pp. 389-403, 1988, in <i>Evolutionary Biology of the Fungi</i> , (A.D.M. Rayner et al. eds., Cambridge University Press)
	BC	Behrens et al., "Eicosapentaenoic Acid from Microalgae", p. 623, col. 2, abstract no. 193025d, 1989, Chemical Abstracts, Vol. 111, No. 21, Nov. 20.
	BD	Cavalier-Smith, "The Origin of Nuclei and of Eukaryotic Cells", pp. 463-468, 1975, <i>Nature</i> , Vol. 256
	BE	Cerda-Olmeda et al., "A Biography of <i>Phycomyces</i> ", pp. 7-26, 1987, in <i>Phycomyces</i> , (Cerda-Olmeda et al. eds., CSH Laboratory)
	BF	Couch et al., 1973, <i>Lipids</i> , 8(7):385-392
	BG	Cruickshank, 1934, "Studies in Fat Metabolism in the Fowl" in <i>Biochem. J.</i> , 28:965-977
<i>AW</i>	BH	Dick, "Saprolegniales", pp. 113-144, 1973, in <i>The Fungi. An Advanced Treatise</i> , (G.C. Ainsworth et al. eds., Academic Press)

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AW	BI	Ellenbogen, "Polyunsaturated Fatty Acids of Aquatic Fungi: Possible Phylogenetic Significance", pp. 805-811, 1969, <i>Comp. Biochem. Physiol.</i> , Vol. 29
	BJ	Emerson, "Current Trends of Experimental Research in the Aquatic Phycomycetes", pp. 169-200, 1950, <i>Ann. Rev. Micro.</i> , Vol. 4
	BK	Erwin, "Comparative Biochemistry of Fatty Acids in Eukaryotic Microorganisms", pp. 41-143, 1973, in <i>Lipids and Biomembranes of Eukaryotic Microorganisms</i> , (J. Erwin ed., Academic Press)
	BL	Findlay et al., "Biochemical Indicators of the Role of Fungi and Thraustochytrids in Mangrove Detrital Systems", pp. 91-103, 1986, in <i>The Biology of Marine Fungi</i> , (S.T. Moss ed., Cambridge University Press)
	BM	Fisher et al., 1957, <i>J. Nutr.</i> , 63:119-129
	BN	Fuller, et al., "Isolation and Pure Culture Study of Marine Phycomycetes", pp. 745-756, 1964, <i>Mycologia</i> , Vol. 56
	BO	Gellerman et al., "Methyl-Directed Desaturation of Arachidonic to Eicosapentaenoic Acid in the Fungus, <i>Saprolegnia Parasitica</i> ", pp. 23-30, 1979, <i>Biochim. Biophys. Acta</i> , Vol. 573
	BP	Goldstein, "Development and Nutrition of New Species of Thraustochytrium", pp. 271-279, 1963, <i>Am. J. Bot.</i> , Vol. 50
	BQ	Goldstein et al., "Biology of a Problematic Marine Fungus, <i>Dermocystidium</i> sp. II. Nutrition and Respiration", pp. 468-472, 1969, <i>Mycologia</i> , Vol. 61
	BR	Goldstein et al., "Biology of a Problematic Marine Fungus, <i>Dermocystidium</i> sp. I. Development and Cytology", pp. 1-11, 1966, <i>Archiv for Mikrobiologie</i> , Vol. 53.1
	BS	Hagemester et al., STN Database, AN 88:13222 Biobusiness for Milchwissenschaft, Vol. 43, No. 3, pp. 153, 155-158
	BT	Henderson et al., "Lipid Composition and Biosynthesis in the Marine Dinoflagellate <i>Cryptocodinium Cohnii</i> ", pp. 1679-1683, 1988, <i>Phytochemistry</i> , Vol. 27, No. 6
	BU	Hori et al., "The Nucleotide Sequence of 5S rRNA from a Cellular Slime Mold <i>Dictyostelium Discoideum</i> ", pp. 5535-5539, 1980, <i>Nucl. Acids Res.</i> , Vol. 8
	BV	Hunter, "Fish Oil and Other Omega-3 Sources", pp. 1592-1596, 1987, <i>J. Am. Oil Chem. Soc.</i> , Vol. 64
	BW	Jong et al., "American Type Culture Collection Catalogue of Fungi/Yeast", pp. 350 and 378, <i>American Type Culture Collection</i> , 17th Edition, 1987.
	BX	Kates, "Techniques of Lipidology: Isolation, Analysis and Identification of Lipids", pp. 186-278, 1986, <i>Laboratory Techniques in Biochemistry and Molecular Biology</i> , Vol. 3
	BY	Kyle, "Microalgae as a Source of EPA-Containing Oils", p. 1251, 1987, <i>J. Am. Oil Chem. Soc.</i> , Vol. 64
AW	BZ	Lepage et al., "Improved Recovery of Fatty Acid Through Direct Transesterification Without Prior Extraction or Purification", pp. 1391-1396, 1984, <i>J. Lipid Res.</i> , Vol. 25

EXAMINER Anthony Weiner	DATE CONSIDERED 2/28/00
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AA	CA	Lipstein et al., "The Nutritional and Economic Value of Algae for Poultry" in <i>Algae Biomass</i> , G. Shelef and C.J. Soeder, eds., Elsevier/North-Holland Biomedical Press, 1980, pp. 667-685
	CB	Lipstein et al., 1980, <i>Br. Poultry Sci.</i> , 21:9-21
	CC	Mannella et al., "Interrelatedness of 5S RNA Sequences Investigated by Correspondence Analysis", pp. 228-235, 1987, <i>J. Mol. Evol.</i> , Vol. 24
	CD	Miller, "Isolation and Pure Culture of Aquatic Phycomycetes by Membrane Filtration", pp. 524-527, 1967, <i>Mycologia</i> , Vol. 59
	CE	Moss, "Biology and Phylogeny of the Labrinthulales and Thraustochytriales", pp. 105-129, 1986, in <i>The Biology of Marine Fungi</i> , (S.T. Moss ed., Cambridge University Press)
	CF	Murty et al., 1961, <i>J. Nutrition</i> , 75:287-294
	CG	Navarro et al., 1972, <i>J. Sci. Fd. Agric.</i> , 23:1287-1292
	CH	Perkins, "Phylogenetic Considerations of the Problematic Thraustochytriaceae-Labrinthulid-Dermocystidium Complex Based on Observations of Fine Structure", pp. 45-63, 1974, <i>Veroff. Inst. Meeresforsch. Bremerh. Suppl.</i> , Vol. 5
	CI	Pigot, "The Need to Improve Omega-3 Content of Cultured Fish", pp. 63-68, 1989, <i>World Aquaculture</i> , Vol. 20
	CJ	Pohl et al., "Fatty Acids and Lipids of Marine Algae and the Control of Their Biosynthesis by Environmental Factors", pp. 473-523, 1979, <i>Marine Algae in Pharmaceutical Science</i> , (Hoppe et al. eds.)
	CK	Reiser, 1951, <i>J. Nutrition</i> , 44:159-175
	CL	Ryther, "Cultivation of Macroscopic Marine Algae", pp. 79-88, 1983, <i>Solar Energy Research Institute Aquatic Species Program Review. Proc of the March 1983 Principal Investigators Meeting</i> , SERI/CPI-231 1946
	CM	Schlenk, "Urea Inclusion Compounds of Fatty Acids", pp. 243-267, 1954, <i>Prog. Chem. Fats and Other Lipids</i> , Vol. 2
	CN	Schneider, "Cultivation of Micro-organisms. Section 3.2: Fungi", pp. 337-345, 1976, in <i>Marine Ecology</i> , Vol. 3, Part 1. <i>Cultivation</i> , (O. Kinne ed., Wiley and Sons)
	CO	Simopoulos et al. (eds.), <i>Health Effects of Polyunsaturated Fatty Acids in Seafoods</i> , Chaps. 2-5, 7, 17, 1986, Academic Press)
	CP	Sorokin, "Dry Weight, Packed Cell Volume and Optical Density", pp. 321-343, 1973 in <i>Handbook of Phycological Methods: Culture Methods and Growth Measurements</i> , (J.R. Stein ed., Cambridge University Press)
	CQ	Sparrow, <i>Aquatic Phycomycetes</i> , pp. 36-39, 1960, University of Michigan Press
	CR	Wassef, "Fungal Lipids", pp. 159-232, 1977, <i>Adv. Lipid Res.</i> , Vol. 15
	CS	Weete, "Fatty Acids", pp. 49-95, 1980, in <i>Lipid Biochemistry of Fungi and Other Organisms</i> , (Plenum Press)
AV	CT	Yamada et al., "Production of Arachidonic Acid and Eicosapentaenoic Acid by Microorganisms", p. 1254, 1987, <i>J. Am. Oil Chem. Soc.</i> , Vol. 64

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ACU	CU	Akimoto et al., "Metal Salts Requisite for the Production of Eicosapentaenoic Acid by a Marine Bacterium Isolated from Mackerel Intestines", pp. 504-508, 1991, <i>JAOCS</i> , Vol. 68, July.
	CV	Ando et al., "Incorporation of n-3 Polyunsaturated Fatty Acids into Phospholipids of a Marine Bacterium <i>Vibrio</i> sp. Cultivated with Sardine Oil", pp. 169-171, 1992, <i>J. Fern. Bioeng.</i> , Vol. 73.
	CW	Bajpai et al., "Production of Docosahexaenoic Acid by <i>Thraustochytrium aureum</i> ", pp. 706-710, 1991, <i>Appl. Microbiol. Biotechnol.</i> , Vol. 35.
	CX	Bajpai et al., "Effects of Aging <i>Mortierella</i> Mycelium on Production of Arachidonic and Eicosapentaenoic Acids", pp. 775-780, 1991, <i>JAOCS</i> , Vol. 68, October.
	CY	Bajpai et al., "Optimization of Production of Docosahexaenoic Acid (DHA) by <i>Thraustochytrium aureum</i> ATCC 34304", pp. 509-514, 1991, <i>JAOCS</i> , Vol. 68, July.
	CZ	Bajpai et al., "Eicosapentaenoic Acid (EPA) Formation; Comparative Studies with <i>Mortierella</i> Strains and Production by <i>Mortierella elongata</i> ", pp. 1294-1298, 1991, <i>Mycol. Res.</i> , Vol. 95.
	DA	Boswell et al., "SCO Production by Fermentative Microalgae", pp. 274-286, 1992, in <i>Industrial Applications of Single Cell Oils</i> (Kyle et al., eds.), American Oil Chemists' Society, Champaign, IL.
	DB	Cohen et al., "Overproduction of γ -Linolenic and Eicosapentaenoic Acids by Algae", pp. 569-572, 1992, <i>Plant Physiol.</i> , Vol. 98.
	DC	Gandhi et al., "Production of the Polyunsaturated Fatty Acids Arachidonic Acid and Eicosapentaenoic Acid by the Fungus <i>Pythium ultimum</i> ", pp. 1825-1830, 1991, <i>J. Gen. Microbiol.</i> , Vol. 137.
	DD	Hansen et al., "Effects of Culture Conditions on Accumulation of Arachidonic and Eicosapentaenoic Acids in Cultured Cells of <i>Rhytidadelphus squarrosus</i> and <i>Eurhynchium striatum</i> ", pp. 1837-1841, 1991, <i>Phytochemistry</i> , Vol. 30.
	DE	Kendrick et al., "Microbial Polyunsaturated Fatty Acids of Potential Commercial Interest", pp. 59-65, 1992, <i>SIM-Industrial Microbiology NEWS</i> , Vol. 42.
	DF	Kendrick et al., "Lipids of Selected Molds Grown for Production of n-3 and n-6 Polyunsaturated Fatty Acids", pp. 15-20, 1992, <i>LIPIDS</i> , Vol. 27.
	DG	Kyle et al., "Bioproduction of Docosahexaenoic Acid (DHA) by Microalgae", pp. 287-300, 1992, in <i>Industrial Applications of Single Cell Oils</i> (Kyle et al., eds.), American Oil Chemists' Society, Champaign, IL.
	DH	Kyle et al., "Microalgae as a Source of EPA-Containing Oils", pp. 117-121, 1988, <i>Proc. World Conf. Biotechnol. Fats Oils Ind.</i>
	DI	Radwan, "Sources of C ₂₀ -Polyunsaturated Fatty Acids for Biotechnical Use", pp. 421-430, 1991, <i>Appl. Microbiol. Biotechnol.</i> , Vol. 35.
V	DJ	Yazawa et al., "Production of Eicosapentaenoic Acid from Marine Bacteria", pp. 29-51, 1992, in <i>Industrial Applications of Single Cell Oils</i> (Kyle et al., eds.), American Oil Chemists' Society, Champaign, IL.
AKU	DK	Yongmanitchai et al., "Screening of Algae for Potential Alternative Sources of Eicosapentaenoic Acid", pp. 2963-2967, 1991, <i>Phytochemistry</i> , Vol. 30.

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DL	Yamada et al., "Production of Dihomo- γ -Linolenic Acid, Arachidonic Acid and Eicosapentaenoic Acid by Filamentous Fungi", pp. 118-138, 1992, in <i>Industrial Applications of Single Cell Oils</i> (Kyle et al., eds.), American Oil Chemists' Society, Champaign, IL.
DM	Yongmanitchai et al., "Omega-3 Fatty Acids: Alternative Sources of Production", pp 117-125, 1989, <i>Proc. Biochem.</i>

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